

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A method for reducing a condition associated with fetal alcohol syndrome in a subject who is exposed to alcohol *in utero*, the method comprising the steps of:

(i) selecting a pregnant female having consumed alcohol during pregnancy in an amount sufficient to initiate a condition associated with fetal alcohol syndrome in the subject; and

(ii) administering to the subject an activity dependent neurotrophic factor (ADNF) polypeptide in an amount sufficient to reduce in the subject the condition associated with fetal alcohol syndrome,

wherein the ADNF polypeptide is a member selected from the group consisting of:

(a) an ADNF I polypeptide comprising an active core site having the amino acid sequence Ser-Ala-Leu-Leu-Arg-Ser-Ile-Pro-Ala (SEQ ID NO:1);

(b) an ADNF III polypeptide comprising an active core site having the amino acid sequence Asn-Ala-Pro-Val-Ser-Ile-Pro-Gln (SEQ ID NO:2); and

(c) a mixture of the ADNF I polypeptide of (a) and the ADNF III polypeptide of (b).

2. (Canceled)

3. (Previously presented) The method of claim 1, wherein the ADNF polypeptide is a member selected from the group consisting of:

(a) a full length ADNF I polypeptide,

- (b) a full length ADNF III polypeptide, and
- (c) a mixture of a full length ADNF I polypeptide and a full length ADNF III polypeptide.

4. (Original) The method of claim 1, wherein the ADNF polypeptide is an ADNF I polypeptide.

5. (Previously presented) The method of claim 4, wherein the ADNF I polypeptide consists of the amino acid sequence Ser-Ala-Leu-Leu-Arg-Ser-Ile-Pro-Ala (SEQ ID NO:1).

6. (Previously presented) The method of claim 4, wherein the ADNF I polypeptide consists of an amino acid sequence selected from the group consisting of:

- (a) Val-Leu-Gly-Gly-Gly-Ser-Ala-Leu-Leu-Arg-Ser-Ile-Pro-Ala (SEQ ID NO:14);
- (b) Val-Glu-Glu-Gly-Ile-Val-Leu-Gly-Gly-Gly-Ser-Ala-Leu-Leu-Arg-Ser-Ile-Pro-Ala (SEQ ID NO:15);
- (c) Leu-Gly-Gly-Gly-Ser-Ala-Leu-Leu-Arg-Ser-Ile-Pro-Ala (SEQ ID NO:16);
- (d) Gly-Gly-Gly-Ser-Ala-Leu-Leu-Arg-Ser-Ile-Pro-Ala (SEQ ID NO:17);
- (e) Gly-Gly-Ser-Ala-Leu-Leu-Arg-Ser-Ile-Pro-Ala (SEQ ID NO:18); and
- (f) Gly-Ser-Ala-Leu-Leu-Arg-Ser-Ile-Pro-Ala (SEQ ID NO:19).

7. (Currently amended) The method of claim 4, wherein the ADNF I polypeptide comprises up to ~~about~~ 20 amino acids at the N-terminus or the C-terminus of the active core site.

8. (Original) The method of claim 1, wherein the ADNF polypeptide is an ADNF III polypeptide.

9. (Previously presented) The method of claim 8, wherein the ADNF III polypeptide consists of the amino acid sequence Asn-Ala-Pro-Val-Ser-Ile-Pro-Gln (SEQ ID NO:2).

10. (Previously presented) The method of claim 8, wherein the ADNF III polypeptide consists of an amino acid sequence selected from the group consisting of:

- (a) Gly-Gly-Asn-Ala-Pro-Val-Ser-Ile-Pro-Gln (SEQ ID NO:20);
- (b) Leu-Gly-Gly-Asn-Ala-Pro-Val-Ser-Ile-Pro-Gln-Gln-Ser (SEQ ID NO:21);
- (c) Leu-Gly-Leu-Gly-Gly-Asn-Ala-Pro-Val-Ser-Ile-Pro-Gln-Gln-Ser (SEQ ID NO:22); and
- (d) Ser-Val-Arg-Leu-Gly-Leu-Gly-Gly-Asn-Ala-Pro-Val-Ser-Ile-Pro-Gln-Gln-Ser (SEQ ID NO:23).

11. (Currently amended) The method of claim 8, wherein the ADNF III polypeptide comprises up to ~~about~~ 20 amino acids at the N-terminus or the C-terminus of the active core site.

12. (Previously presented) The method of claim 2, wherein the ADNF polypeptide is a mixture of the ADNF I polypeptide of (a) and the ADNF III polypeptide of (b).

13. (Previously presented) The method of claim 12, wherein the ADNF I polypeptide is consists of the amino acid sequence Ser-Ala-Leu-Leu-Arg-Ser-Ile-Pro-Ala (SEQ ID NO:1), and wherein the ADNF III polypeptide consists of the amino acid sequence Asn-Ala-Pro-Val-Ser-Ile-Pro-Gln (SEQ ID NO:2).

14. (Previously presented) The method of claim 12, wherein the ADNF I polypeptide consists of an amino acid sequence selected from the group consisting of:

- (a) Val-Leu-Gly-Gly-Gly-Ser-Ala-Leu-Leu-Arg-Ser-Ile-Pro-Ala (SEQ ID NO:14);
- (b) Val-Glu-Glu-Gly-Ile-Val-Leu-Gly-Gly-Gly-Ser-Ala-Leu-Leu-Arg-Ser-Ile-Pro-Ala (SEQ ID NO:15);

(c) Leu-Gly-Gly-Gly-Ser-Ala-Leu-Leu-Arg-Ser-Ile-Pro-Ala (SEQ ID NO:16);

(d) Gly-Gly-Gly-Ser-Ala-Leu-Leu-Arg-Ser-Ile-Pro-Ala (SEQ ID NO:17);

(e) Gly-Gly-Ser-Ala-Leu-Leu-Arg-Ser-Ile-Pro-Ala (SEQ ID NO:18);

(f) Gly-Ser-Ala-Leu-Leu-Arg-Ser-Ile-Pro-Ala (SEQ ID NO:19); and

(g) Ser-Ala-Leu-Leu-Arg-Ser-Ile-Pro-Ala (SEQ ID NO:1); and

wherein the ADNF III polypeptide consists of an amino acid sequence selected from the group consisting of:

(a) Asn-Ala-Pro-Val-Ser-Ile-Pro-Gln (SEQ ID NO:2);

(b) Gly-Gly-Asn-Ala-Pro-Val-Ser-Ile-Pro-Gln (SEQ ID NO:20);

(c) Leu-Gly-Gly-Asn-Ala-Pro-Val-Ser-Ile-Pro-Gln-Gln-Ser (SEQ ID NO:21);

(d) Leu-Gly-Leu-Gly-Gly-Asn-Ala-Pro-Val-Ser-Ile-Pro-Gln-Gln-Ser (SEQ ID NO:22); and

(e) Ser-Val-Arg-Leu-Gly-Leu-Gly-Gly-Asn-Ala-Pro-Val-Ser-Ile-Pro-Gln-Gln-Ser (SEQ ID NO:23).

15. (Currently amended) The method of claim 12, wherein the ADNF I polypeptide comprises up to ~~about~~ 20 amino acids at the N-terminus or the C-terminus of the active core site of the ADNF I polypeptide, and wherein the ADNF III polypeptide comprises up to ~~about~~ 20 amino acids at the N-terminus or the C-terminus of the active core site of the ADNF III polypeptide.

16. (Currently amended) The method of claim ~~2~~ 1, wherein ~~at least one of the ADNF polypeptides is encoded by a nucleic acid which is administered~~ administration of the ADNF polypeptide is achieved by administering a nucleic acid encoding the ADNF polypeptide to the subject.

17. (Original) The method of claim 1, wherein the condition is decreased body weight of the subject.

18. (Original) The method of claim 1, wherein the condition is decreased brain weight of the subject.

19. (Original) The method of claim 1, wherein the condition is a decreased level of VIP mRNA or protein of the subject.

20. (Original) The method of claim 1, wherein the condition is decreased viability of the subject *in utero*.

21. (Original) The method of claim 1, wherein the condition is decreased learning.

22-33. (Cancelled)

34. (Previously presented) The method of claim 1, wherein step (ii) comprises administering the ADNF polypeptide directly to the subject.

35. (Previously presented) The method of claim 1, wherein step (ii) comprises administering the ADNF polypeptide to the pregnant female during pregnancy.